

Claims

10/591117

1. A multilayer dose (1) having an axis of symmetry for the realization of multilayer objects by compression molding, constituted by a first synthetic resin (2) and by a thin functional layer (3) imprisoned in said first resin (2), said functional layer (3) representing less than 20% of the volume of the dose (1), characterized in that the functional layer (3) forms the shell of a body of revolution about the axis of symmetry and in that the distance from the functional layer (3) to the axis of symmetry is variable.
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- 15 2. The dose (1) as claimed in claim 1, characterized in that the ratio $(R_{min}-R_0)/(R_{max}-R_0)$ is less than 0.8, R_{max} and R_{min} being respectively the maximum and minimum distances from the functional layer (3) to the axis of symmetry and R_0 being the radius of an orifice centered about the axis of symmetry, the value of R_0 conforming to the following relationship: $0 \leq R_0 < R_{min}$.
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- 25 3. The dose (1) as claimed in either one of the preceding claims, characterized in that the functional layer (3) itself forms a multilayer structure (3a, 3b, 3c) comprising a layer of barrier resin (3c) imprisoned between two layers of adhesive resin (3a, 3b).
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- 35 4. The dose (1) as claimed in one of the preceding claims, comprising a plurality of functional layers.
5. A multilayer object obtained by compression molding of a multilayer dose (1) having an axis of symmetry, said dose (1) being constituted by a first synthetic resin (2) and by a thin functional

layer (3) imprisoned in the first resin (2), the functional layer (3) representing less than 20% of the volume of the dose (1), the functional layer (3) forming the shell of a body of revolution about the axis of symmetry of the dose (1) and the distance from the functional layer (3) to the axis of symmetry being variable.

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6. A process for the production of an axisymmetrical multilayer dose as claimed in any one of claims 1 to 4, comprising a step in which the distance from the functional layer (3) to the axis of symmetry of the dose (1) is varied, said process consisting in coextruding a multilayer rod or tube of resins in the molten state, then in periodically cutting said rod or said tube in the molten state, the flow rate of at least one layer varying periodically, the periodicity of the flow rate being equal to the periodicity of the cutting.

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7. The process as claimed in claim 6, characterized in that the flow rate of two layers varies periodically and in phase opposition.

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8. A process for the production of an axisymmetrical multilayer dose as claimed in any one of claims 1 to 4, comprising a step in which the distance from the functional layer (3) to the axis of symmetry of the dose (1) is varied, said process consisting in injecting, into the cavity of a mold, a plurality of resins (2, 3) in the molten state, at least one of which is a functional resin (3), the injection of the functional layer (3) being preceded and followed by the injection of at least one resin (2), then in ejecting the dose (1) in the molten state from the cavity of said mold, and in varying the volume of the cavity proportionally to the volume of resin injected.

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